

AMENDMENTS TO THE DRAWINGS WITHOUT MARKINGS

IN THE DRAWING:

Fig. 2 has been amended.

REMARKS

The last Office Action of August 9, 2006 has been carefully considered. Reconsideration of the instant application in view of the foregoing amendments and the following remarks is respectfully requested.

Claims 1-29 are pending in the application. Claims 1, 3-5, 7-15, 18, 19, 21, 23, and 25-29 have been amended. Claims 2, 6, 16, 22 have been canceled. An amendment to the specification has been made. No fee is due.

It is noted that the drawings are objected to because of applicant's failure to designate Fig. 2 as --Prior Art--. A new drawing sheet is submitted and labeled "Replacement Sheet".

It is further noted that the specification is objected to because of the reference to German patent application Serial No. 102 31 675.9 upon which foreign priority is claimed. As this German patent application is part of the application, the objected-to language in paragraph [0001] has been deleted.

It is further noted that claims 1-14 are rejected under 35 U.S.C. §101 because the claimed invention is drawn to non-statutory subject matter.

Claims 1-29 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. Claims 2 and 16 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-29 stand rejected under 35 U.S.C. §102(b) as being anticipated by or in the alternative under 35 U.S.C. §103(a) as obvious over "Dymola Dynamic Modeling Laboratory", Version 5.0, Dynasim AB, 2002 (hereinafter "Dymola"), or "Modelics - A language for Physycal System Modeling, visualization and Interaction, Elmqvist et al, Proceedings of International Symposium on CASD, 1999 IEEE (hereinafter "Elmqvist").

Claims 1-29 stand rejected under 35 U.S.C. §103(a) as obvious in view of either Dymola or Elmquist.

CLAIM REJECTIONS - 35 U.S.C. §101

Claim 1 has been amended to recite that the mechanical simulator and the control simulator are embodied on a computer-readable medium, rendering claim 1 statutory. Claim 1 also recites storage medium and a display.

Withdrawal of the rejection of the claims 1-14 under 35 U.S.C. §101 is thus respectfully requested.

CLAIM REJECTIONS - 35 U.S.C. §112, FIRST PARAGRAPH

Applicant submits that the invention is enabled by the specification. A skilled artisan will immediately recognize that the invention is directed to in interactive cooperation between a mechanical simulation model of a machine and a control simulation model which have in the prior art been addressed separately. With the present invention, a mechanical model of a machine is set up, and this mechanical model is operated, on a simulation basis, by a control simulation program. If the control simulation indicates that the parameters of the mechanical model are incapable of or ill suited to perform the desired machine functions, then the mechanical model is updated based on the stored parameter set and a new control simulation is performed. The control simulation program is likewise updated based on the updated results from the mechanical model.

This approach is described in detail in paragraphs [0013] to [0016] and [0025] to [0027] of the original specification.

It is the convergence of the two previously separately performed steps, which should be appreciated by a skilled artisan upon reading of the instant specification, the claims, and inspection of the drawings.

Applicant therefore submits that claims 1-29 are enabled.

Withdrawal of the rejection of the claims 1-29 under 35 U.S.C. §112, first paragraph is thus respectfully requested.

CLAIM REJECTIONS - 35 U.S.C. §112,

The rejection of claims 2 and 16 has become moot, as these claims have been canceled.

Withdrawal of the rejection under 35 U.S.C. §112, second paragraph is thus respectfully requested.

CLAIM REJECTIONS 35 U.S.C. §§102/103

Claims 1, 15 and 29 are the independent claims and recite substantially identical subject matter.

Claim 1, as amended herein, recites a system for simulating a production and/or processing machine to optimize selection of machine hardware and a machine controller. The system includes a storage device for storing mechanical and electrical parameters of components suitable for use in the machine, a mechanical simulator executing a mechanical simulation program configured for setting up at least one mechanical model of the machine with at least a subset of the components, and a control simulator executing a control simulation program for simulating at least the subset of the components. The mechanical simulation program and the control simulation program are embodied on a computer-readable medium. The system further includes a display for displaying a response of the mechanical model to the control simulation program. The mechanical model and the control simulation program are interactively adjusted to optimize cooperation between the selection of the subset of the components and the control simulation program so as to produce an optimized machine hardware selection and an optimized machine controller.

Applicant agrees with the Examiner's assessment that Dymola or Elmqvist disclose a simulator for setting up a mechanical model of a machine and simulating a mechanical (or electrical) performance of the machine with simulation data produced by a simulator/controller. However, Applicant evaluated the cited

references as best understood, but was unable to find a teaching or suggestion in Dymola or Elmqvist that "*the mechanical model and the control simulation program are interactively adjusted to optimize cooperation between the selection of the subset of the components and the control simulation program so as to produce an optimized machine hardware selection and an optimized machine controller*", as recited in claim 1.

Some of these features were included in original claims 7 and 21. Claims 7 and 21 have been retained, but have also been amended for clarification.

In the above rejections of claims 1, 15, and 29, and also of at least claims 7 and 21, under 35 U.S.C. §102 and §103, the Examiner failed to provide the specificity which would enable the Applicant to respond to the rejections in detail.

Specifically, in a rejection under §102, 37 C.F.R. §1.104(2) clearly mandates that "[i]n rejecting claims for want of novelty or for obviousness, the examiner must cite the best references at his or her command. When a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable. The pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified." (Emphasis added)

The Examiner also fails to meet the specificity requirements of M.P.E.P. § 2142 in the § 103 rejection based on *Dymola or Elmqvist*. More particularly, M.P.E.P. § 2142 requires that, in the case of a rejection under § 103, the Examiner present a convincing line of reasoning as to why an artisan would find the invention obvious in light of the cited reference. §2142 also requires that the Examiner explain with reasonable specificity at least one rejection, otherwise the Examiner procedurally fails to establish a *prima facie* case of obviousness. In contradiction of the specificity requirements of M.P.E.P. § 2142, in rejecting claims 1, 15 and 29, the instant Action, on pages 7-9, after reciting elements of claim 1, provides a broad brush citation of the entire teaching in *Dymola* and of five sections in *Elmqvist*. In doing so, the Action fails to explain how any of the cited sections relate to any of the recited elements of claims 1, 15 and 29.

(Emphasis added)

Since the *Dymola* and *Elmqvist* rejections fails to meet the specificity requirements of M.P.E.P. § 2142, should the Examiner intend to maintain this rejection, Applicants respectfully request that the Examiner provide the required specificity under M.P.E.P. § 2142 to enable Applicants to understand and respond to issues raised by the Examiner.

Applicant submits that claims 1, 15, and 29 are patentable over *Dymola* and *Elmqvist*. The retained dependent claims 3-5, 7-14, 17-21, and 23-28 are then also patentable for at least the reasons that claims 1 and 15 are patentable. Withdrawal of all outstanding objections and rejections is therefore requested.

Withdrawal of the rejection under 35 U.S.C. §§102(b)/103(a) and allowance of claims 1, 3-5, 7-15, 17-21, and 23-29 are thus respectfully requested.

CITED REFERENCES

Applicant has also carefully scrutinized the further cited prior art and finds it without any relevance to the claims on file. It is thus felt that no specific discussion thereof is necessary.

IDS

It is noted that the Examiner has not considered the references as submitted with the Information Disclosure Statement, as filed on July 14, 2003, because no translation of the documents had been provided. Applicant respectfully disagrees with the Examiner's interpretation of 37 C.F.R. §1.98, and draws the Examiner's attention to Section 609 of the MPEP. As stated therein, the minimum requirements for information to be considered includes (1) a list of the information submitted, (2) a legible copy, and (3) a concise explanation of the relevance, whereby the concise explanation may be either separate from the specification or incorporated therein. It further sets forth that "*once the minimum requirements are*

*met, the examiner has **an obligation** to consider the information."* [emphasis added]. According to 37 C.F.R. 1.98(a)(3)(ii), applicant should submit "[A] *copy of the translation if a written English-language translation of a non-English-language document, or portion thereof, is within the possession, custody, or control of, or is readily available to any individual designated in § 1.56(c)*". No translation of the submitted materials is in possession of applicant or applicant's representative. However, applicant did provide an explanation of the relevance of the submitted materials. It is therefore applicant's contention that the prior art, submitted in this Information Disclosure Statement should thus be considered and made of record.

For the reasons set forth, applicant respectfully requests that the Examiner reconsiders his refusal and considers the submitted information.

Applicant submits herewith the PTO-Form 1449 again, and the Examiner is requested to initial the attached form PTO-1449 and to return a copy of the initialed document to the undersigned as an indication that the attached references have been considered and made of record.

CONCLUSION

Applicant believes that when reconsidering the claims in the light of the above comments, the Examiner will agree that the invention is in no way properly met or anticipated or even suggested by any of the references however they are considered.

In view of the above presented remarks and amendments, it is respectfully submitted that all claims on file should be considered patentably differentiated over the art and should be allowed.

Reconsideration and allowance of the present application are respectfully requested.

Should the Examiner consider necessary or desirable any formal changes anywhere in the specification, claims and/or drawing, then it is respectfully requested that such changes be made by Examiner's Amendment, if the Examiner

feels this would facilitate passage of the case to issuance. If the Examiner feels that it might be helpful in advancing this case by calling the undersigned, applicant would greatly appreciate such a telephone interview.

Respectfully submitted,

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